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Graefes Arch Clin Exp Ophthalmol. 1996 Aug 23;4 Suppl 1:S96-100.

Nerve growth factor delays retinal degeneration in C3H mice.

Lambiase A, Aloe L.

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Abstract

BACKGROUND: The aim of the present study was to investigate the biological role of nerve growth factor (NGF) on retinal degeneration in the C3H mouse strain. This strain is characterized by a single gene mutation (*rd*) which leads to photoreceptor degeneration resembling human retinitis pigmentosa. **METHODS:** Neural retinas from 1- to 25 day-old C3H mice were dissected from outer ocular tissues, dissociated in cell suspension, stained with a vital dye and counted in a hemocytometer. For *in vivo* study, NGF was injected into the intraocular or retro-ocular area, and at the end of the treatment the mice were killed. The eyes were enucleated, fixed and cut by cryostat into 14-microns serial sections. The serial sections were stained with hematoxylin-eosin and the outer nuclear layer (ONL) was measured using a computerized image analysis system. **RESULTS:** An intraocular injection of NGF, or repeated retro-ocular injections, induced a significant increase in ONL thickness compared to controls. **CONCLUSION:** Our data show that NGF inhibits retinal degeneration in C3H mice. The mechanism(s) underlying the protective action of NGF against retinal cell death remains to be established.

PMID: 8871157 [PubMed - indexed for MEDLINE]

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Muzi S, Colafrancesco V, Sorinelli F, Mantelli F, Lambiase A, Aloe L.
Cornea. 2010 Jun 30. [Epub ahead of print]
PMID: 20696895 [Published - as supplied by publisher]
- [Ocular Application of Nerve Growth Factor Protects Degenerating Retinal Ganglion Cells in a Rat Model of Glaucoma.](#)
Colafrancesco V, Parisi V, Sposato V, Rossi S, Russo MA, Coassin M, Lambiase A, Aloe L.
J Glaucoma. 2010 Apr 29. [Epub ahead of print]
PMID: 20446644 [Published - as supplied by publisher]
- [Phase II study of asparagine-glycine-arginine-human tumor necrosis factor alpha, a selective vascular targeting agent, in previously treated patients with malignant pleural mesothelioma.](#)
Gregorc V, Zucali PA, Santoro A, Ceresoli GL, Citterio G, De Pas TM, Zilembo N, De Vincenzo F, Simonelli M, Rossoni G, Spreafico A, Grazia Viganò M, Fontana F, De Braud FG, Bajetta E, Caligaris-Cappio F, Bruzzi P, Lambiase A, Bordignon C.
J Clin Oncol. 2010 May 20;28(15):2604-11. Epub 2010 Apr 20.
PMID: 20405005 [Published - in progress]
- [Tailored approach to the treatment of vernal keratoconjunctivitis.](#)
Sacchetti M, Lambiase A, Mantelli F, Deligianni V, Leonardi A, Bonini S.
Ophthalmology. 2010 Jul;117(7):1294-9. Epub 2010 Apr 10.
PMID: 20283497 [Published - in progress]
- [Phase I clinical and magnetic resonance imaging study of the vascular agent NGR-hTNF in patients with advanced cancers \(European Organization for Research and Treatment of Cancer Study 18041\).](#)
van Laarhoven HW, Fiedler W, Desai IM, van Asten JJ, Marraud S, Lacombe D, Govaerts AS, Bogaerts J, Lasch P, Timmer-Bonte JN, Lambiase A, Bordignon C, Punt CJ, Herschbach A, van Herpen CM.
Clin Cancer Res. 2010 Feb 15;16(4):1315-23. Epub 2010 Feb 9.
PMID: 20145149 [Published - indexed for MEDLINE]
- [Nerve growth factor eye drops improve visual acuity and electrofunctional activity in age-related macular degeneration: a case report.](#)
Lambiase A, Coassin M, Tirassa P, Mantelli F, Aloe L.
Ann Ist Super Sanita. 2009;45(4):439-42.
PMID: 20061094 [Published - indexed for MEDLINE] [Free Article](#)
- [Sclerobacterium respiratory tract infection in patients with cystic fibrosis.](#)
Lambiase A, Rossano F, Del Pezzo M, Raia V, Sepe A, de Gregorio F, Catania MR.
BMC Res Notes. 2009 Dec 23;2:262.
PMID: 20006640 [Published - in progress] [Free PMID Article](#) [CrossRef](#)
- [Defining the optimal biological dose of NGR-hTNF, a selective vascular targeting agent, in advanced solid tumours.](#)
Gregorc V, Citterio G, Vitali G, Spreafico A, Scito P, Borri A, Donadoni G, Rossoni G, Corti A, Caligaris-Cappio F, Del Maschio A, Esposito A, De Cobelli F, Dell'Acqua F, Troys A, Bruzzi P, Lambiase A, Bordignon C.
Eur J Cancer. 2010 Jan;46(1):198-206. Epub.
PMID: 19909802 [Published - indexed for MEDLINE]
- [Toxic corneal ulcer: a frequent and sight-threatening disease.](#)
Sacchetti M, Lambiase A, Coassin M, Bonini S, Bonini S.
Eur J Ophthalmol. 2009 Nov-Dec;19(6):916-22.
PMID: 19855549 [Published - indexed for MEDLINE]
- [Typing of Pseudomonas aeruginosa isolated from patients with VAP in an intensive care unit.](#)
Lambiase A, Rossano F, Piazza O, Del Pezzo M, Catania MR, Tufano R.
New Microbiol. 2009 Jul;32(3):277-83.
PMID: 19446110 [Published - indexed for MEDLINE]
- [Nerve growth factor modulates toll-like receptor \(TLR\) 4 and 9 expression in cultured primary VKC conjunctival epithelial cells.](#)
Micera A, Stampacchiare B, Normando EM, Lambiase A, Bonini S, Bonini S.
Mol Vis. 2009 Oct 13;15:2037-44.
PMID: 19844859 [Published - indexed for MEDLINE] [Free PMID Article](#) [CrossRef](#)

12. [Experimental and clinical evidence of neuroprotection by nerve growth factor eye drops: Implications for glaucoma](#).
Lambiase A, Aloe L, Centofanti M, Parisi V, Mantelli F, Colafrancesco V, Manni GL, Bucci MG, Bonini S, Levi-Montalcini R.
Proc Natl Acad Sci U S A. 2009 Aug 3. [Epub ahead of print]
PMID: 19650281 [PubMed - as supplied by publisher] Free PMC Article [Free text](#)
13. [In vivo characterization of doxycycline effects on tear metalloproteinases in patients with chronic blepharitis](#).
Iovieno A, Lambiase A, Micera A, Stampacchiachiere B, Sgrulletta R, Bonini S.
Eur J Ophthalmol. 2009 Sep-Oct;19(5):708-16.
PMID: 19767560 [PubMed - indexed for MEDLINE]
14. [Multiple action agents and the eye: do they really stabilize mast cells?](#)
Lambiase A, Micera A, Bonini S.
Curr Opin Allergy Clin Immunol. 2009 Oct;9(5):454-65. Review.
PMID: 19862586 [PubMed - indexed for MEDLINE]
15. [T-helper 17 lymphocytes in ocular cicatricial pemphigoid](#).
Lambiase A, Micera A, Mantelli F, Moretti C, Di Zazzo A, Perrella E, Bonini S, Bonini S.
Mol Vis. 2009 Jul 28;15:1449-55.
PMID: 19618768 [PubMed - indexed for MEDLINE] Free PMC Article [Free text](#)
16. [A simple and rapid diagnostic algorithm for the detection of ocular allergic diseases](#).
Mantelli F, Lambiase A, Bonini S.
Curr Opin Allergy Clin Immunol. 2009 Oct;9(5):471-6. Review.
PMID: 19862586 [PubMed - indexed for MEDLINE]
17. [Therapeutic effect of topical 5-fluorouracil in conjunctival squamous carcinoma is associated with changes in matrix metalloproteinases and tissue inhibitor of metalloproteinases expression](#).
Iovieno A, Lambiase A, Moretti C, Perrella E, Bonini S.
Cornea. 2009 Aug 28(7):821-4.
PMID: 19578666 [PubMed - indexed for MEDLINE]
18. [Phase Ib study of NGR-hTNF, a selective vascular targeting agent, administered at low doses in combination with doxorubicin to patients with advanced solid tumours](#).
Gregorc V, Santoro A, Bencicelli E, Punt CJ, Citterio G, Timmer-Bonte JN, Caligaris Cappio F, Lambiase A, Bordignon C, van Herpen CM.
Br J Cancer. 2009 Jul 21;101(2):219-24. Epub 2009 Jun 30.
PMID: 19684638 [PubMed - indexed for MEDLINE]
19. [Pseudomonas aeruginosa in a neonatal intensive care unit: molecular epidemiology and infection control measures](#).
Crivaro V, Di Popolo A, Caprio A, Lambiase A, Di Resta M, Borriello T, Scarcella A, Triassi M, Zarrilli R.
BMC Infect Dis. 2009 May 22;9:70.
PMID: 19483180 [PubMed - indexed for MEDLINE] Free PMC Article [Free text](#)
20. [In vitro evidence of nerve growth factor effects on human conjunctival epithelial cell differentiation and mucin gene expression](#).
Lambiase A, Micera A, Pellegrini G, Merlo D, Rama P, De Luca M, Bonini S, Bonini S.
Invest Ophthalmol Vis Sci. 2009 Oct;50(10):4622-30. Epub 2009 Apr 30.
PMID: 19483180 [PubMed - indexed for MEDLINE]

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- [Ocular Application of Nerve Growth Factor Protects Degenerating Retinal Ganglion Cells in a Rat Model of Glaucoma.](#)
Colafrancesco V, Parisi V, Sposato V, Rossi S, Russo MA, Coassin M, Lambiase A, Aloe L.
J Glaucoma. 2010 Apr 29 [Epub ahead of print]
PMID: 20444444 [PubMed - as supplied by publisher]
- [Nerve growth factor eye drops improve visual acuity and electrofunctional activity in age-related macular degeneration, a case report.](#)
Lambiase A, Coassin M, Tirassa P, Mantelli F, Aloe L.
Ann Ist Super Santa. 2009;45(4):439-42.
PMID: 20094444 [PubMed - indexed for MEDLINE] Free Article
- [Experimental and clinical evidence of neuroprotection by nerve growth factor eye drops: Implications for glaucoma.](#)
Lambiase A, Aloe L, Centofanti M, Parisi V, Mantelli F, Colafrancesco V, Manni GL, Buccì MG, Bonini S, Levi-Montalcini R.
Proc Natl Acad Sci U S A. 2009 Aug 3 [Epub ahead of print]
PMID: 19944444 [PubMed - as supplied by publisher] Free PMC Article [CrossRef](#)
- [Anti-NGF antibody administration as collyrium reduces the presence of NGF and enhances the expression of VEGF in the retina, lacrimal gland and hippocampus.](#)
Colafrancesco V, Cirulli F, Rossi S, Berry A, Aloe L.
Neurosci Lett. 2009 Oct 9;463(3):203-6. Epub 2009 Aug 3.
PMID: 19944444 [PubMed - indexed for MEDLINE]
- [Reduced NGF level and TrkA protein and TrkA gene expression in the optic nerve of rats with experimentally induced glaucoma.](#)
Sposato V, Buccì MG, Coassin M, Russo MA, Lambiase A, Aloe L.
Neurosci Lett. 2008 Nov 28;446(1):20-4. Epub 2008 Sep 18.
PMID: 19344444 [PubMed - indexed for MEDLINE]
- [Eye drop NGF administration promotes the recovery of chemically injured cholinergic neurons of adult mouse forebrain.](#)
Di Fausto V, Fiore M, Tirassa P, Lambiase A, Aloe L.
Eur J Neurosci. 2007 Nov 26(9):2473-80. Epub 2007 Oct 23.
PMID: 17944444 [PubMed - indexed for MEDLINE]
- [Nerve growth factor eye drop administered on the ocular surface of rodents affects the nucleus basalis and septum: biochemical and structural evidence.](#)
Lambiase A, Pagani L, Di Fausto V, Sposato V, Coassin M, Bonini S, Aloe L.
Brain Res. 2007 Jan 5;1127(1):45-51. Epub 2006 Nov 17.
PMID: 17144444 [PubMed - indexed for MEDLINE]
- [Pharmacokinetics of conjunctivally applied nerve growth factor in the retina and optic nerve of adult rats.](#)
Lambiase A, Tirassa P, Micera A, Aloe L, Bonini S.
Invest Ophthalmol Vis Sci. 2005 Oct;46(10):3800-6.
PMID: 16444444 [PubMed - indexed for MEDLINE] Free Article
- [\[Effects of Schwann cell-derived neurotrophic activity on cultured retinal ganglion cells survive and grow in normal and gas-deprived environment\]](#)

Huang W, Wang L, Hui Y, Ma J.

Yan Ke Xue Bao. 2002 Dec;18(4):235-9. Chinese

PMID: 12615703 [PubMed - indexed for MEDLINE]

10. Effect of exogenous neurotrophins on Trk receptor phosphorylation, cell proliferation, and neurotrophin secretion by cells isolated from the human lamina cribrosa.

Lambert WS, Clark AF, Wordinger RJ.

Mol Vis. 2004 Apr 19;10:289-96.

PMID: 15105273 [PubMed - indexed for MEDLINE] Free Article

11. Influence of hormones and growth factors on lens protein composition: the effect of dexamethasone and PDGF-AA.

Vinader LM, van Genseen ST, de Jong WW, Lubsen NH.

Mol Vis. 2003 Dec 18;9:723-9.

PMID: 14651442 [PubMed - indexed for MEDLINE] Free Article

12. Study of the role of the low-affinity neurotrophin receptor p75 in naturally occurring cell death during development of the rat retina.

Ding J, Hu B, Tang LS, Yip HK.

Dev Neurosci. 2001;23(6):390-8.

PMID: 11676923 [PubMed - indexed for MEDLINE]

13. NGF administered by microdialysis into rabbit vitreous.

Waga J, Ehinger B.

Acta Ophthalmol Scand. 2000 Apr 78(2):154-5.

PMID: 10794287 [PubMed - indexed for MEDLINE]

14. Induction of cyclooxygenase-2 gene expression in retinal pigment epithelium cells by photoreceptor rod outer segment phagocytosis and growth factors.

Ershov AV, Bazan NG.

J Neurosci Res. 1999 Oct 15;58(2):254-61.

PMID: 10466987 [PubMed - indexed for MEDLINE]

15. Suppression of trkB expression by antisense oligonucleotides alters a neuronal phenotype in the rod pathway of the developing rat retina.

Rickman DW, Bowes Rickman C.

Proc Natl Acad Sci U S A. 1996 Oct 29;93(22):12564-9.

PMID: 8801082 [PubMed - indexed for MEDLINE] Free PMC Article [View Full](#)

16. Nerve growth factor delays retinal degeneration in C3H mice.

Lambiase A, Aloe L.

Graefes Arch Clin Exp Ophthalmol. 1996 Aug 234 Suppl 1:S96-100.

PMID: 8871167 [PubMed - indexed for MEDLINE]

17. Partial characterization of a putative new growth factor present in pathological human vitreous.

Pombo C, Bokser L, Casabiell X, Zugaza J, Capeans M, Salorio M, Casanueva F.

Graefes Arch Clin Exp Ophthalmol. 1996 Mar;234(3):155-63.

PMID: 8726718 [PubMed - indexed for MEDLINE]

18. Inhibition of ocular dominance column formation by infusion of NT-4/5 or BDNF.

Cabelli RJ, Hohn A, Shatz CJ.

Science. 1995 Mar 17;267(5204):1662-6.

PMID: 7739886 [PubMed - indexed for MEDLINE]

19. Trophic effect of collicular proteoglycan on neonatal rat retinal ganglion cells in situ.

Huxlin KR, Carr R, Schulz M, Setton AJ, Bennett MR.

Brain Res Dev Brain Res. 1995 Jan 14;84(1):77-88.

PMID: 7720225 [PubMed - indexed for MEDLINE]

20. Developing rat retinal ganglion cells express the functional NGF receptor p140trkA.

Zanellato A, Cornelli MC, Dal Toso R, Carmignoto G.

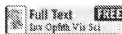
Dev Biol. 1993 Sep;159(1):105-13.

PMID: 8363554 [PubMed - indexed for MEDLINE]

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Invest Ophthalmol Vis Sci. 1993 Nov;34(12):3232-45.

Nerve growth factor promotes functional recovery of retinal ganglion cells after ischemia.

Sillprandi R, Canella R, Carmignoto G.

Fidia Research Laboratories, Abano Terme, Italy.

Abstract

PURPOSE: To investigate the effect of a transient complete ischemia on the function of cat retina and to determine whether nerve growth factor (NGF), which was previously shown to enhance retinal ganglion cell (RGC) survival after optic nerve section in the adult rat, can promote recovery of retinal neurons after the ischemic insult. **METHODS:** Function of distal and proximal retina was assessed by recording the electroretinogram in response to both homogeneous flickering light (FERG) and contrast reversing gratings (PERG), respectively, 30 days after the induction of a 60-minute episode of ischemia. Visual evoked potentials in response to contrast reversing gratings were also recorded to evaluate visual acuity and contrast thresholds. Cell survival after ischemia was assessed in retinal whole-mounts stained with cresyl violet. Cats were intraocularly treated with NGF every other day, 3 times a week, for 30 days. Controls were treated with either phosphate buffered saline or cytochrome c. **RESULTS:** After ischemia, the FERG was not significantly affected. On the contrary, the PERG, visual acuity, and contrast thresholds were severely impaired. After NGF treatment, PERG response amplitudes were much less reduced compared to controls, and visual acuity and contrast thresholds were virtually normal. In addition, a larger number of presumed RGCs was present in the NGF-treated retinas compared to the cytochrome c-treated ones. **CONCLUSIONS:** The more proximally located retinal neurons, particularly RGCs, are highly vulnerable to ischemia. Intraocular NGF treatment was effective in enhancing the functional recovery of these neurons. This suggests that NGF may represent a novel therapeutic agent for the treatment of ischemic ocular pathologies.

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